



# Watch, Warning, Advisory (WWA) Application Information Summary

New Features and Functions in AWIPS Build OB2

WWA-OB2-000-NEW

June 4, 2003

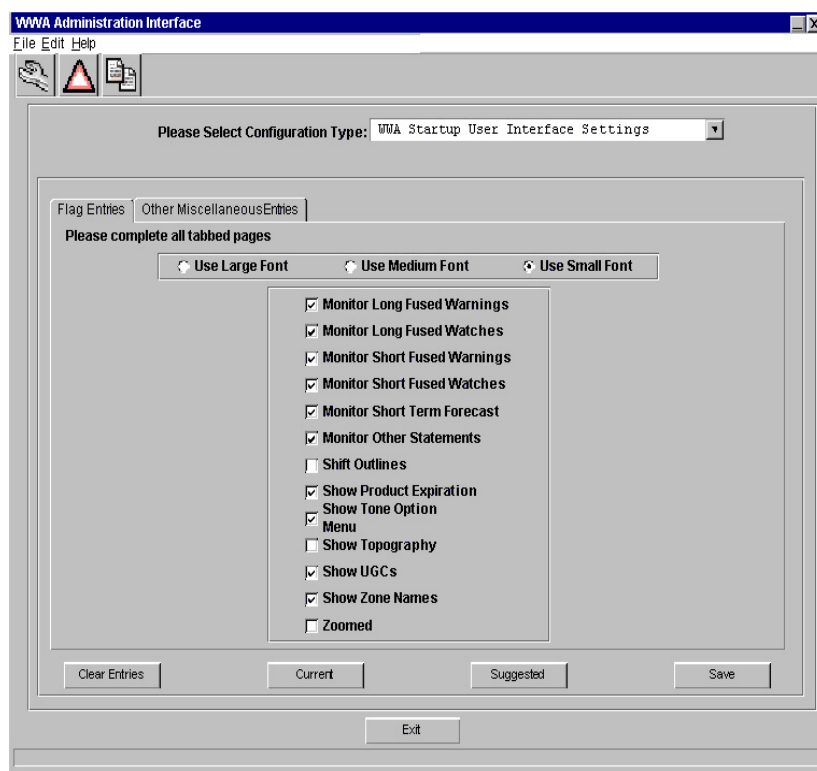
Numerous changes were made to the WWA application in AWIPS build OB2 and because of this it is more important than ever to have a correctly configured WWA application. This document provides a general overview of new features incorporated into build OB2, which also revolves around the advertised WWA self-contained model. To learn more about WWA self-contained functionality reference: <http://www.nws.noaa.gov/mdl/wwa/docs/SelfContainedWWA.pdf> For a complete and detailed list of changes, reference the OB2 release notes at: [http://www.nws.noaa.gov/mdl/wwa/release\\_notes.htm](http://www.nws.noaa.gov/mdl/wwa/release_notes.htm)

## ❖ WWA Administration Tool ❖

First delivered in AWIPS build OB2 the WWA Administration application provides administrators a single tool from which to configure WWA. It is no longer necessary to command line edit files and databases which simplifies the local configuration process.

This application supports functionality found in the wwa\_setup program with an addition to configuration: the WCN process, GUI settings, NWR settings, segmentation ordering, template file editing, VTEC settings, and much more.

Finally, the wwa\_setup program will be discontinued in AWIPS build OB3 and for this reason sites are encouraged to utilize the WWA Admin application after the OB2 install. More information on the WWA Admin Application can be obtained in the WWA OB2 users guide located on the WWA web page.



Example of WWA Admin interface (not an actual screen shot)

WWA Administration Application Users Guide:

<http://www.nws.noaa.gov/mdl/wwa/docs/WWA-OB2-000-Admin.pdf>

Detailed Design documents:

<http://www.nws.noaa.gov/mdl/wwa/docs/WWAAdminMockUp.pdf>

<http://www.nws.noaa.gov/mdl/wwa/docs/WWAAdminDesign.PDF>

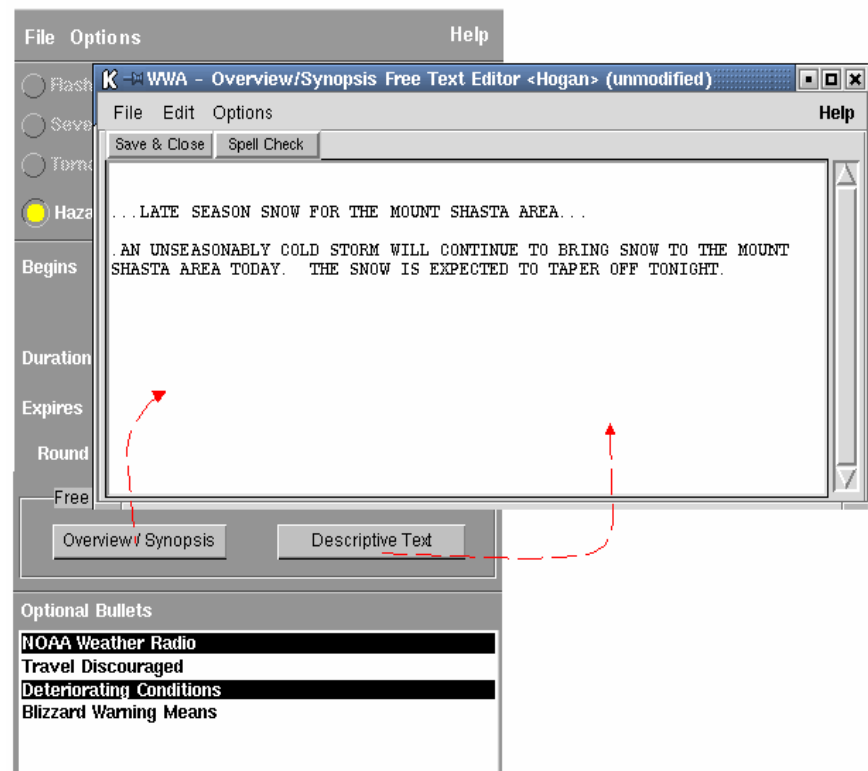
## ❖ Capture Free Text ❖

Through a modified WWA Composer interface and with the addition of a free text editor (FTE) forecasters can now enter Overview/Synopsis and Descriptive free text directly into the WWA application. Capturing free text will allow this text to be carried through the products life cycle when performing follow-up, clear, and cancel functions.

To accommodate this functionality two buttons were added to the WWA Composer, labeled *Overview/Synopsis* and *Descriptive Text*. Selecting either button will launch a FTE done in the same state as adjusting product times or county/zone selections, prior to selecting the *transmit* button. In most cases free text is entered as just described, however in the event of county/zone overlap WWA formats a virtual segment displaying descriptive text from each overlapping hazard in the FTE, after *transmit* is selected. This allows forecasters to edit the descriptive text, automatically generated and prior to transmitting the product.

When providing Overview/Synopsis free text for multi-segmented products, like a winter storm warning (WSW) that could contain a winter weather advisory and heavy snow warning, only a single Overview/Synopsis is needed in the final WSW. Because of this, the Overview/Synopsis FTE will remain the same for each segment created while the Composer remains open. In the event of collecting segments stored in the WWA Monitor after the WWA Composer window has closed, the Overview/Synopsis section of the first selected segment prior to transmitting will be captured in the final product.

Finally, the FTE used for capturing free text input does not contain a spell check function as originally designed. This will be addressed in a future software release.



Example of the WWA free text editor launched from composer interface. (not an actual screen shot)

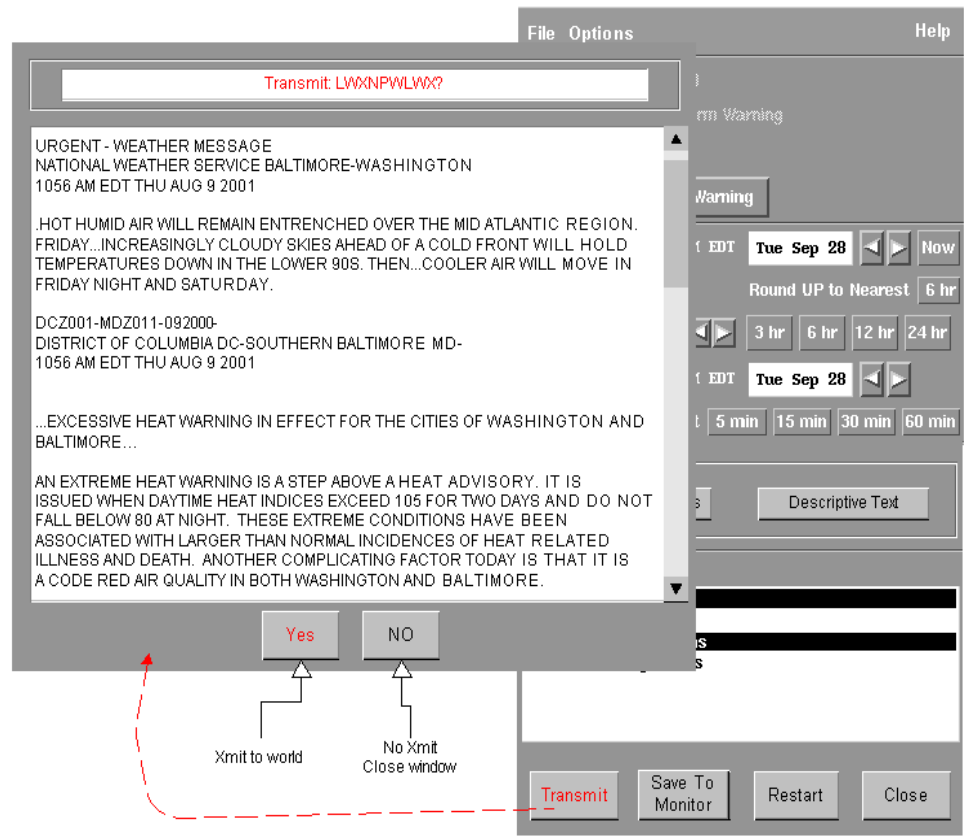
## ❖ Transmit Capability ❖

OB2 WWA no longer utilizes the text workstation and text editor to disseminate products. Instead the ability to transmit directly from WWA is provided through the use of the AWIPS handleOUP.pl function. Because generated text is no longer passed to the text workstation for editing it is more important than ever to have WWA correctly configured.

Although XT text editing is no longer supported a large effort was made to ensure forecasters have the ability to edit key fields during operational use. These functions include: Capturing free text, editing headlines, manipulating time sequences, selecting call to action statements, and much more.

### General Information:

- ▶ Formatting the WCN product will not use the transmit function, and therefore the text workstation will continue as the means of disseminating WCN products. For more information reference the WCN Users Guide from the WWA web page.
- ▶ handleOUP.pl uses the afos2awips.txt (a2a) file to determine product routing information and therefore **it is extremely important that the site maintain an accurate and up to date a2a file.**
- ▶ A *transmit* button replaced the *create text* button in the WWA Monitor which works similar to the transmit option found in the WWA Composer and displays a single or multi-segmented product before dissemination.
- ▶ An intentional limitation to this design prohibits multiple transmit windows from being active at one time, included to maintain WWA database integrity. In OB3 this will change from multiple transmit windows, to multiple transmit windows for like products.
- ▶ Products transmitted through this function are addressed to “ALL”, with the exception of operating in practice mode.



Example of transmit interface launched from WWA Composer (not an actual screen shot)

## ❖ Composer Menu Bar ❖

As new OB2 functionality was added, interface space became limited and because of this a menu bar was developed into the WWA Composer. As part of the WWA self-contained model some menu options were provided, but grayed out (unselectable) until development is complete. Below is a list of each item found in the WWA Composer menu bar, **black** for active and **grey** for inactive functions:

**File:** Menu option that contains a *Close* function to exit the WWA composer interface. This functionality echos the *Close* button found on the bottom right of the composer interface.

**Forecaster Identification:** This function launches a separate user interface providing a selectable list of predefined forecaster identification, which are appended to the end of issued products. Default setting is “off” or no selection.

**Headline Editor:** This checkbox activates a headline editor to edit template file populated headlines before transmitting.

**Mode:** This cascading menu contains a toggle between *Active*, *Practice*, *Test*, and *Proposed* modes. Each selected state maintains its setting until altered by the forecaster or reset to the default, *Active*, setting upon client startup.

**Active:** Default and operational setting.

**Practice:** A function to generate WWA products without actually disseminating publically.

**Test:** Sets the WWA application to work exactly like the active function with the word “TEST” strategically placed in the final product. Products will disseminate publically.

**Proposed:** Setting used as an intersite coordination tool. Not used for public dissemination.

**Site Backup:** Cascading menu to select site service backup.

**Reset All:** Resets the following: overview/synopsis & descriptive text fields, geo-viewer, time functions, tone alert, bullets, headlines, and hazard menu selections to default settings.

**Reset Times:** Resets the beginning, duration, and expiration time fields located on the WWA composer to default values.

**Reset Geographical Area:** Resets any selected zone/county fields located in the active Geo-Viewer map to default setting.

**Reset Bullets:** Resets any selected bullets located on the WWA composer interface to default setting.

**Help:** Menu function with access to WWA help options.

**Help Menu:** Inactive function until defined

## ❖ Test and Practice Modes ❖

Test and practice modes built into this version of WWA allow sites to create test and practice messages under the new self-contained design. Both functions are managed within WWA and because of this no additional configuration is necessary to operate in either mode.

### Test Mode:

Test mode was designed to act as close to active, or operational, mode as possible with the exception of the word “TEST” strategically placed in the final product - See image on this page. In other words, products generated in test mode will disseminate publically, will format NWR products if set as active, and will utilize intersite coordination.

### Practice Mode:

Practice mode works much differently than either test or active. In short, creating and transmitting practice products will store locally at WWA WRK WWA and not disseminate publically, will override NWR formatting and send CRS formatted products to the NWR browser, and will not utilize intersite coordination. However, the ability to follow-up, clear, and cancel is preserved, and similar to test mode, text will have “TEST” strategically placed in the final product. The idea behind practice mode is to provide a working WWA that will not disseminate internally or externally (public, adjacent sites, NWR).

NATIONAL WEATHER SERVICE NORTHERN INDIANA  
1000 AM EST TUE MAR 26 2002

**...TEST TEST TEST, THIS IS ONLY A TEST. THIS IS NOT AN ACTIVE SEVERE WEATHER STATEMENT.** LOW PRESSURE OVER SOUTH CENTRAL INDIANA WILL TRACK NORTHEAST INTO NORTH CENTRAL OHIO LATE THIS AFTERNOON. THIS TRACK WILL BRING A MIX OF WINTER WEATHER TO NORTHWEST OHIO AND NORTHERN INDIANA.

A MIX OF SNOW/SLEET/FREEZING RAIN WILL CONTINUE TO CAUSE SLICK ROADWAYS AND SIDEWALKS. TAKE EXTRA CAUTION WHILE TRAVELING AND ALLOW MORE TIME TO REACH YOUR DESTINATION.

STAY TUNED TO NOAA WEATHER RADIO AND OTHER LOCAL MEDIA FOR FURTHER DETAILS OR UPDATES.

INZ008-009-013-015>018-020-022>025-OHZ001-002-004-005-015-016-262100-  
ALLEN IN-CASS IN-DE KALB IN-DEFIANCE OH-FULTON OH-FULTON IN-HENRY OH-  
HUNTINGTON IN-KOSCIUSKO IN-MIAMI IN-NOBLE IN-PAULDING OH-PULASKI IN-  
PUTNAM OH-WABASH IN-WHITE IN-WHITLEY IN-WILLIAMS OH-  
INCLUDING THE CITIES OF...ARCHBOLD...AUBURN...BRYAN...BUTLER...  
COLUMBIA CITY...DEFIANCE...FORT WAYNE...GARRETT...GRISSOM AFB...  
HICKSVILLE...HUNTINGTON...KENDALLVILLE...LIGONIER...LOGANSPORT...  
MONTICELLO...MONTPELIER...NAPOLEON...NEW HAVEN...NORTH MANCHESTER...  
OTTAWA...PERU...ROCHESTER...SW ANTON...SYRACUSE...TRI-LAKES...  
WABASH...WARSAW...WAUSEON...WINAMAC AND WINONA LAKE  
1018 AM EST TUE MAR 26 2002

**...TEST** WINTER WEATHER ADVISORY IN EFFECT FROM 10 AM THIS MORNING TO 11 AM EST WEDNESDAY **TEST...**

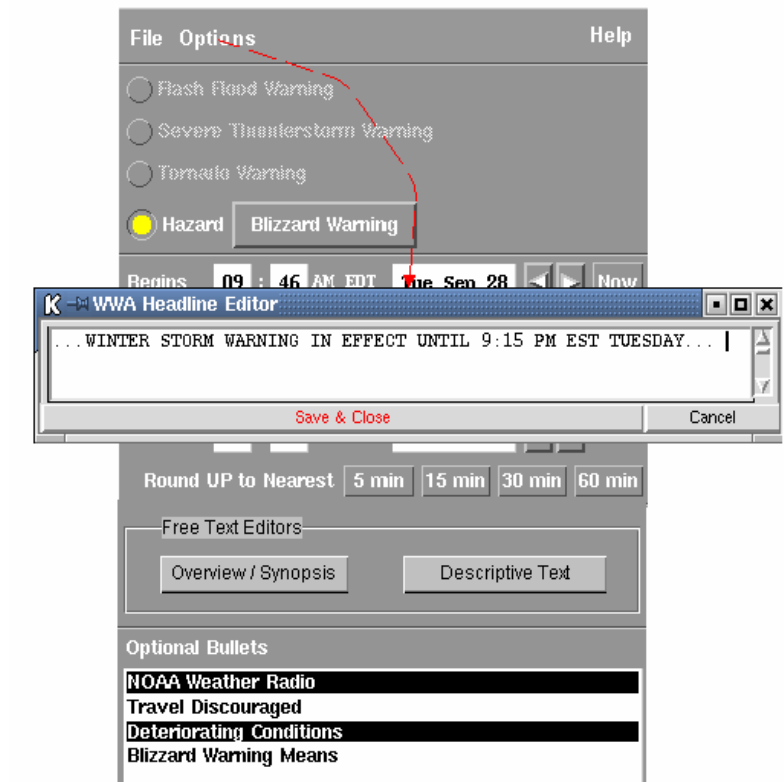
**TEST TEST TEST, THIS IS ONLY A TEST. THIS IS NOT AN ACTIVE SEVERE WEATHER STATEMENT.**

SNOW WILL CONTINUE INTO THE AFTERNOON HOURS...THEN BEGIN TO DIMINISH IN INTENSITY. THE SNOW MAY BE MIXED AT TIMES WITH SLEET. THE HEAVIEST SNOW WILL FALL ALONG A LOGANSPORT TO COLUMBIA CITY TO AUBURN LINE WHERE 5 INCHES OF SNOW IS EXPECTED. ELSEWHERE...3 TO 5 INCHES OF SNOW IS FORECAST.

Example appendix 3 of WWA self-contained design document

## ❖ Time Phrases and Headline Editor ❖

The WWA/WarnGen headline time phrase function was updated based on a new NWS requirement that defines a standardized headline. To accommodate this a template change is necessary for WWA/WarnGen template files, further explained below. Although complete standardization of NWS product headlines is being pursued, policy does not yet cover all cases. Because of this it was necessary to develop a WWA headline editor as shown in the graphic below. This editor is checkbox activated from the WWA Composer, found under *Options* on the menu bar. Activating this function will launch a headline editor, after the *Transmit* button is selected, populated with predefined headlines from associated template files. Because template file headlines are still utilized it is still important to define headlines accurately to minimize editing during operations. Finally, the headline editor checkbox is inactive by default to support NWS policy that mandates a standardized headline.



Example of headline editor (Not an actual screen shot)

### Template Change:

The listed WWA\*.preWWA template files contain the time/date qualifier changes (6hour / 12hour / 24hour) for templates located in the nationalData directory. This must be merged into local templates found in customFiles directory.

Before (OB1):

<PHRASE | 6hour>

After (OB2):

<PHRASE|warningAdvisory> or <PHRASE|watch>

<AREA |file=wwa\_timezone |area=wwa\_zones |timezone>

The above AREA substitution was also adjusted so NWS header bullets use the correct time zones associated with the areal extent of the product.

### **WWA Template Files:**

WWA_bizzard_wrn.preWWA	WWA_bloodust_adv.preWWA	WWA_bloodust_wrn.preWWA
WWA_blosnow_adv.preWWA	WWA_excheat_wrn.preWWA	WWA_exheat_wat.preWWA
WWA_exheat_wrn.preWWA	WWA_fog_adv.preWWA	WWA_freez_adv.preWWA
WWA_frost_adv.preWWA	WWA_frost_wrn.preWWA	WWA_frostfrz_outlk.preWWA
WWA_frostfrz_wat.preWWA	WWA_frzdrzl_adv.preWWA	WWA_frzfog_adv.preWWA
WWA_frzrain_adv.preWWA	WWA_frzrain_wrn.preWWA	WWA_heat_adv.preWWA
WWA_hiwind_wat.preWWA	WWA_hiwind_wrn.preWWA	WWA_hvysnow_wrn.preWWA
WWA_icestrm_adv.preWWA	WWA_icestrm_wrn.preWWA	WWA_lake_eff_adv.preWWA
WWA_lake_ef_wat.preWWA	WWA_lake_wind_adv.preWWA	WWA_redflag_wat.preWWA
WWA_redflag_wrn.preWWA	WWA_slt_adv.preWWA	WWA_slt_wrn.pre.WWA
WWA_smoke_adv.preWWA	WWA_snow_adv.preWWA	WWA_snow_blosn.preWWA
WWA_volash_adv.preWWA	WWA_volash_wrn.preWWA	WWA_wind_adv.preWWA
WWA_wintstrm_wat.preWWA	WWA_wintstrm_wrn.preWWA	WWA_winwea_adv.preWWA
WWA_wndchil_adv.preWWA	WWA_wndchil_wat.preWWA	WWA_wndchil_wrn.preWWA

### **WWA NWR Template Files:**

nwr_aircraft.preWWA	nwr_alert1.preWWA	nwr_alert2.preWWA
nwr_bizzard_wrn.preWWA	nwr_bloodust_adv.preWWA	nwr_bloodust_wrn.preWWA
nwr_blosnow_adv.preWWA	nwr_excheat_wrn.preWWA	nwr_exheat_wrn.preWWA
nwr_ffld_wat.preWWA	nwr_ffd_wrn.preWWA	nwr_flood_wat.preWWA
nwr_flood_wrn.preWWA	nwr_fog_adv.preWWA	nwr_freeze_wrn.preWWA
nwr_frost_wrn.preWWA	nwr_frzdrzl_adv.preWWA	nwr_frzrain_adv.preWWA
nwr_frzrain_wrn.preWWA	nwr_hazard_outlk_adv.preWWA	nwr_hiwind_wat.preWWA
nwr_hiwind_wrn.preWWA	nwr_hvysnow_wrn.preWWA	nwr_icestrm_adv.preWWA
nwr_icestrm_wrn.preWWA	nwr_pub_info.preWWA	nwr_rec_evt.preWWA
nwr_short.preWWA	nwr_slt_adv.preWWA	nwr_slt_wrn.preWWA
nwr_smoke_adv.preWWA	nwr_nsow_adv.preWWA	nwr_svrt_wat.preWWA
nwr_svrt_wrn.preWWA	nwr_tor_wat.preWWA	nwr_tor_wrn.preWWA
nwr_volash_adv.preWWA	nwr_volash_wrn.preWWA	nwr_wind_adv.preWWA
nwr_wintstrm_wat.preWWA	nwr_wintstrm_wrn.preWWA	nwr_winwea_adv.preWWA
nwr_wndchil_adv.preWWA	nwr_wndchil_wrn.preWWA	nwr_wsr88d.preWWA

Although national WarnGen template files do not use this PHRASE/AREA substitution, locally defined templates will need to accommodate this change if utilized.

For more information standard time phrases in product headlines reference:

<http://www.nws.noaa.gov/mdl/wwa/docs/WWAHeadlineTimePhrase.pdf>



## ❖ Upgrade/Downgrade/Replace Functionality ❖

The ability to upgrade/downgrade/replace watches and warnings has been implemented in OB2, with limitations. So as not to increase WWA “buttonology”, logic for this function was built into the WWA software to automatically recognize an upgrade/downgrade/replacement for WSWs, NPWs, & RFWs, and any forecaster interaction is done through user prompts. Forecasters validate the prompted upgrade/downgrade/replace request which will generate the appropriate text and associated VTEC string. Finally, this function can be turned on or off from the WWA Administration interface with a default setting as active.

There are a couple limitations to this function. First, it is not possible within one formatted product to upgrade the same WWA (e.g. Winter Storm Watch) to more than one advisory or warning (e.g. Blizzard Warning and Sleet Warning).

### **For Example:**

- ▶ A forecaster issues a Winter Storm Watch for the entire area (zones A,B,C).
- ▶ At some point later they decide that zone A should be a Blizzard Warning and that zone B should be a Winter Storm Advisory.
- ▶ With the updated version of WWA this will not work. Each segment will have to be disseminated separately.

Second, outside the initial generation of the watch, access to the watch text is not provided. In other words, when a watch is issued free text can be entered, however after forecaster validation of an upgrade/downgrade, the watch text is carried through to the final product with no editor provided.

Functional limitation are recognized and will be addressed in future builds. If in the meantime these restrictions are more burden than benefit sites are encouraged to deactivate this function.

To review the OCWWS requirement document reference:

<http://www.nws.noaa.gov/mdl/wwa/docs/WWAupgradedowngradever2.pdf>

## ❖ SPS and HWO Products Now Segmented ❖

NWS policy has changed the SPS & HWO products from non-segmented to segmented formats. To accommodate this need the following template files were updated:

### **WWA NWR Template Files:**

WWA_head_outlook.preWWA	WWA_severe_outlook.preWWA	WWA_specialstmt.preWWA
WWA_ww_outlk.preWWA	WWA_frostfrz_outlk.preWWA	WWA_nonhazard_outlk.preWWA
WWA_hazard_outlk.preWWA	*WWA_hwo.preWWA	*WWA_sps.preWWA

This change also necessitates a change in the WWA database. OB2 install procedures will activate the segmentation checkbox for the associated hazard selections / template files, also editable from the WWA Admin or wwa\_setup applications. The template files listed above will install to the nationalData directory and sites must copy these templates into the customFiles directory, make any local changes, and run a WWA localization.

*\* New template file not previously provided.*



## ❖ Hydrologic (H)-VTEC Format ❖

The Hydrologic (H)-VTEC format developed into WWA OB2 is specific to the special “Areal” type formatting. This additional (H)-VTEC line will display directly below the (P)-VTEC line and will look similar to the FFW example below.

```
WGUS51 KOKX 141656
FFWOKX
NYC103-141800-
/NEW.KOKX.FF.W.0101.000814T1655Z-000814T1800Z/
/0.ER.000000T0000Z.000000T0000Z.000000T0000Z.0/
```

```
BULLETIN - EAS ACTIVATION REQUESTED
FLASH FLOOD WARNING
NATIONAL WEATHER SERVICE NEW YORK NY
1255 PM EDT MON AUG 14 2000
```

THE NATIONAL WEATHER SERVICE IN UPTON NY HAS ISSUED A

\* FLASH FLOOD WARNING FOR  
SOUTHWEST SUFFOLK COUNTY IN SOUTHEASTERN NEW YORK STATE

\* UNTIL 200 PM EDT

\* AT 1254 PM NATIONAL WEATHER SERVICE DOPPLER RADAR INDICATED  
THUNDERSTORMS MOVING NORTHWEST TOWARD THE WARNED AREA.  
RAINFALL RATES FROM 2 TO 3 INCHES PER HOUR WILL CAUSE FLASH  
FLOODING OF LOW LYING AND POOR DRAINAGE AREAS.

REPORT SEVERE WEATHER TO THE NEAREST LAW ENFORCEMENT AGENCY.

\$\$

### Immediate Cause Values

ER	Excessive Rainfall
SM	Snow melt
RS	Rain and Snow Melt
DM	Dam or Levee Failure
GO	Glacier-Dammed Lake Outburst
IJ	Ice Jam
IC	Rain and/or Snow melt and/or Ice Jam
UU	Unknown

As shown the “Areal” type of the (H)-VTEC line mainly represents place holders for each field, with the exception of the Immediate Cause.

WWA supports the “dynamic immediate cause” by providing a selectable list values (above) to the forecaster after *transmit* is selected for hydro based products. In this listbox forecaster will double click the correct value and proceed to product dissemination.

Example FFW highlighting the (H)-VTEC line in blue and the immediate cause in red.

*For more information on VTEC please reference NWSI 10-1703.*

## ❖ Contact Information ❖

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